Order No. ACED051201C3

# Service Manual

AUTOMOTIVE AFTERMARKET

## CQ-C1103H

### Removable Front Panel CD Player / Receiver

## SPECIFICATIONS

**Specifications***

| | |
|---|---|
| **General** | |
| **Power Supply** | **DC 12V (11V - 16V),**<br>**Test Voltage 14.4V**<br>**Negative Ground** |
| **Tone Controls** | **Bass ; ±12dB at 100Hz**<br>**Treble ; ±12dB at 10kHz** |
| **Current Consumption** | **Less than 2.2A (CD play mode, 0.5W×4ch)** |
| **Maximum Power Output** | **45W×4ch (at 1kHz, Vol. Max.)** |
| **Suitable Speaker Impedance** | **4-8** |
| | |
| **FM Stereo Radio** | |
| **Frequency Range** | **87.9 - 107.9MHz** |
| **Usable Sensitivity** | **11.0dBf (1.25 V, 75 )** |
| | |
| **AM Radio** | |
| **Frequency Range** | **530 - 1,602kHz** |
| **Usable Sensitivity** | **28dB/ V (25 V, S/N 20dB)** |
| | |
| **CD Player** | |
| **Sampling Frequency** | **8 times oversampling** |
| **Pick-Up Type** | **Astigma 3-beam** |
| **Light Source** | **Semiconductor Laser** |
| **Wavelength** | **780nm** |
| **Frequency Response** | **20Hz to 20,000Hz (±1dB)** |
| **Signal to Noise Ratio** | **96dB** |
| | |
| **Dimensions**** | **178×50×155mm** |
| **Weight**** | **1.4kg** |

*** Specifications and the design are subject to possible modification without notice due to improvements.**

**** Dimensions and Weight shown are approximate.**

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**IMPORTANT SAFETY NOTICE**

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

# 1. ABOUT LEAD FREE SOLDER (PbF)

**Distinction of PbF PCB:**

**PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.**

**Caution :**

**- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 700 ± 20°F (370 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.**

**- Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C)**

**- This lead free solder will be used for the products after serial No. 1,000,001.**

# 2. FEATUERS

**- 18-FM, 6-AM presets with preset scan**

**- Digital servo for reliable CD playback.**

**- Removable face plate.**

# 3. LASER PRODUCTS

# 4. REPLACEING THE FUSE

**Use fuses of the same specified rating (15A). Using different substitutes or fuses with higher ratings, or connecting the product directly without a fuse, could cause fire or damage to the stereo unit.**

# 5. MAINTENANCE

**Your products is designed and manufactured to ensure a minimum of maintenance. Use a dry, a soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.**

# 6. NOTES

**[RADIO BLOCK]**

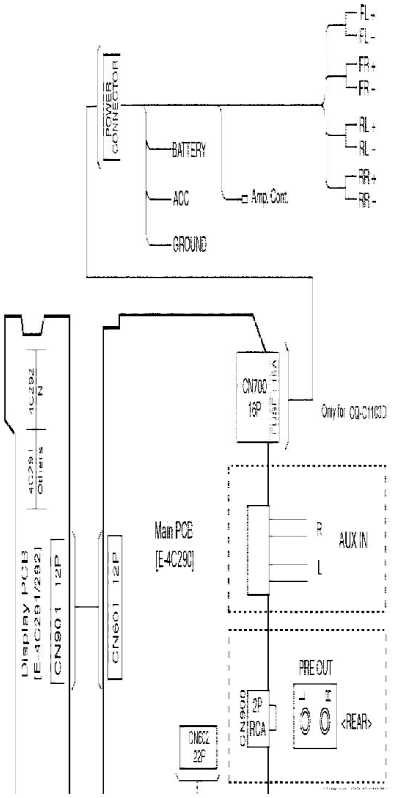
**Do not align the AM/FM package block. When the package block is necessary, it will be supplied already aligned at the factory.**

**[CD DECK BLOCK]**

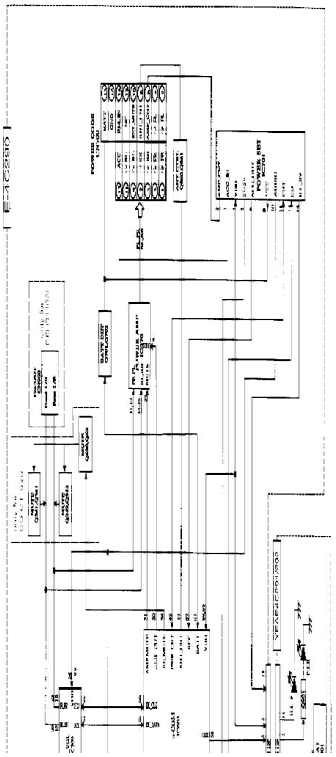
**This model has no servo alignment points because microcomputer controls the servo circuit.**

# 7. DIMENSIONS

# 8. WIRING CONNECTION




# 9. BLOCK DIAGRAM



# 10. TERMINALS DESCRIPTION

## 10.1. Main Block

**IC601 : LC7237819D07**

| Ref. No. | Part No. | Part Name & Description | I/O(V) | FM(V) | AM(V) | CD(V) |
|---|---|---|---|---|---|---|
| 1 | XIN | 4. 5 MHz X'tal and Connection | I | 2.52 | 2.53 | 2.52 |
| 2 | TEST2 | GND connection | I | 0 | 0 | 0 |
| 3 | VREG | Bypass condenser connected. | O | 2.9 | 2.9 | 2.93 |
| 4 | VSSCPU | GND connection | - | 0 | 0 | 0 |
| 5 | CDC_DATA | CD changer data | I | 0 | 0 | 0 |
| 6 | N.C. | None | - | - | - | - |
| 7 | CDC_CLK | CD changer clock | I | 0 | 0 | 0 |
| 8 | CDC_REM_OUT | CD changer Remote out | O | 0 | 0 | 0 |
| 9 | LCD_DO | LCD data output | I | 5,22 | 5,22 | 5.18 |
| 10 | LCD_DI | LCD data input | O | 0 | 0 | 0 |
| 11 | LCD_CLK | LCD clock | O | 5.17 | 5.19 | 5.15 |
| 12 | LCD_CE | LCD chip enable output | O | 0.1 | 0.14 | 0.12 |
| 13 | CD_DO | CD data output | I | 5.34 | 5.35 | 5.12 |
| 14 | CD_DI | CD data input | O | 0 | 0 | 5.2 |
| 15 | CD_CLK | CD clock | O | 5.19 | 5.21 | 5.17 |
| 16 | CD_CE | CD chip enable | O | 0 | 0 | 0.25 |
| 17 | CD_LM+ | CD eject | O | 0 | 0 | 0 |
| 18 | CD_LM- | CD loading | O | 0 | 0 | 0 |
| 19 | CD_S/L | CD 24PIN connection | O | 0 | 0 | 5.21 |
| 20 | CD_WRQ | CD WRQ connection | I | 5.34 | 5.35 | 4.26 |
| 21 | CD_INSW1 | CD insert SW input | I | 0.1 | 0 | 0.1 |
| 22 | CD_SW2 | CD MECHA SW2 | I | 5.17 | 5.21 | 0.1 |
| 23 | CD_LIMIT_SW | CD limit SW | I | 0 | 0 | 5.18 |
| 24 | CD_DRF | CD DRF | I | 0 | 0 | 5.33 |
| 25 | CD_RST | CD reset | O | 5.19 | 5.22 | 5.21 |
| 26 | CD_MUTE | CD mute | O | 0 | 0 | 5.2 |
| 27 | N.C. | None | - | - | - | - |
| 28 | N.C. | None | - | - | - | - |
| 29 | PANEL | Panel detect | I | 5.2 | 5.23 | 5.2 |
| 30 | N.C. | GND connection | I | 0 | 0 | 0 |
| 31 | N.C. | GND connection | I | 0 | 0 | 0 |
| 32 | N.C. | GND connection | I | 0 | 0 | 0 |
| 33 | N.C. | None | - | - | - | - |
| 34 | N.C. | None | - | - | - | - |
| 35 | N.C. | None | - | - | - | - |
| 36 | N.C. | None | - | - | - | - |
| 37 | N.C. | None | - | - | - | - |
| 38 | N.C. | None | - | - | - | - |
| 39 | VDDPORT | Power supply of PORT | - | 5.19 | 5.22 | 5.21 |
| 40 | VSSPORT | GND of PORT | - | 0 | 0 | 0 |
| 41 | N.C. | None | - | - | - | - |
| 42 | N.C. | None | - | - | - | - |
| 43 | N.C. | None | - | - | - | - |
| 44 | N.C. | None | - | - | - | - |
| 45 | N.C. | None | - | - | - | - |
| 46 | N.C. | None | - | - | - | - |
| 47 | N.C. | None | - | - | - | - |
| 48 | N.C. | None | - | - | - | - |
| 49 | PWR_CNT | Power control | O | 5.12 | 5.2 | 5.19 |
| 50 | AMP_CNT | Amp stand-by | O | 5.12 | 5.2 | 5.19 |
| 51 | AMP_MUTE | Amp mute | O | 5.19 | 5.21 | 5.21 |
| 52 | N.C. | None | - | - | - | - |
| 53 | SSC | Tuner search sensitivity change | O | 0 | 0 | 0 |
| 54 | N.C.(AF_MUTE) | AF mute | O | 5.19 | 5.21 | 5.21 |
| 55 | I2C_DATA | Electronic VOL data | O | 5.2 | 5.21 | 5.21 |
| 56 | I2C_CLK | Electronic VOL clock | O | 5.2 | 5.21 | 5.21 |
| 57 | ANT_CNT | Motor antena control | O | 5.19 | 5.21 | 0 |

| Ref. No. | Part No. | Part Name & Description | I/O(V) | FM(V) | AM(V) | CD(V) |
|---|---|---|---|---|---|---|
| 58 | POWER_LED | Power LED | O | 0.15 | 0.15 | 0.12 |
| 59 | N.C. | None | - | - | - | - |
| 60 | N.C. ( BZ_OUT ) | None | - | - | - | - |
| 61 | N.C. | None | - | - | - | - |
| 62 | N.C. | None | - | - | - | - |
| 63 | N.C. | None | - | - | - | - |
| 64 | N.C. | None | - | - | - | - |
| 65 | N.C. | None | - | - | - | - |
| 66 | TEL_MUTE | External MUTE input | I | 5.36 | 5.35 | 5.33 |
| 67 | BATT | Battery detection | I | 5.36 | 5.35 | 5.33 |
| 68 | MODE_B | ROTARY B input | I | 5.17 | 5.18 | 0 |
| 69 | N.C.(RDS_CLK) | None | - | - | - | - |
| 70 | REM_IN | Remocon data input | I | 0 | 0 | 0 |
| 71 | MODE_A | ROTARY A input | I | 5.17 | 5.13 | 5.16 |
| 72 | CDC_STB | CD changer strobe input | I | 0 | 0 | 0 |
| 73 | NC | None | - | - | - | - |
| 74 | MONO | Compulsion MONO ON | O | 0 | 0 | 0 |
| 75 | AM_MODE | AM change | O | 8.21 | 0.13 | 8.23 |
| 76 | FM_MODE | FM change | O | 0.13 | 8.2 | 8.23 |
| 77 | N.C. | GND connection | I | 0 | 0 | 0 |
| 78 | INIT_C | Initial value C | I | 0 | 0 | 0 |
| 79 | INIT_B | Initial value B | I | 5.16 | 5.19 | 5.19 |
| 80 | INIT_A | Initial value A | I | 0 | 0 | 0 |
| 81 | VSS | GND connection | - | 0 | 0 | 0 |
| 82 | N.C.(RDS_DATA) | None | - | - | - | - |
| 83 | ST | FM stereo input | I | 5.34 | 5.2 | 5.4 |
| 84 | SD_FM/AM | Signal detection | I | 3.12 | 3.43 | 0 |
| 85 | N.C. | GND connection | I | 0 | 0 | 0 |
| 86 | RESET | Reset Input | I | 5.2(PWR OFF) | 6.4(PWR OFF) | 5.2(EJECT) |
| 87 | ACC | Power supply | I | 5.42 | 5.42 | 5.42 |
| 88 | N.C. | GND connection | I | 0 | 0 | 0 |
| 89 | N.C. | GND connection | I | 0 | 0 | 0 |
| 90 | FM/AM_IFC | FM/AM IF input | I | 1.42 | 1.42 | 0 |
| 91 | N.C. | GND connection | I | 0 | 0 | 0 |
| 92 | SUBPD | None | O | 2 | 2.02 | 0 |
| 93 | VDDPLL | Power supply of PLL | - | 5.23 | 5.22 | 5.2 |
| 94 | N.C. | GND connection | I | 0 | 0 | 0 |
| 95 | OSC_FM/AM | FM/AM osc input | I | 1.39 | 1.26 | 0 |
| 96 | VSSPLL | GND connection | - | 0 | 0 | 0 |
| 97 | N.C. | None | - | - | - | - |
| 98 | EO1 | PLL phase comparison error output | O | 2 | 2.02 | 0 |
| 99 | TEST1 | GND connection | I | 0 | 0 | 0 |
| 100 | XOUT | 4. 5 MHz X'tal and Connection | O | 2.62 | 2.63 | 2.62 |

Note 1 :

**Voltage measuerments are with respect to ground, with a voltmeter (internal resistance : 10M ohms).**

## 10.2. Display Block

**IC901 : YEAMLC75853NW**

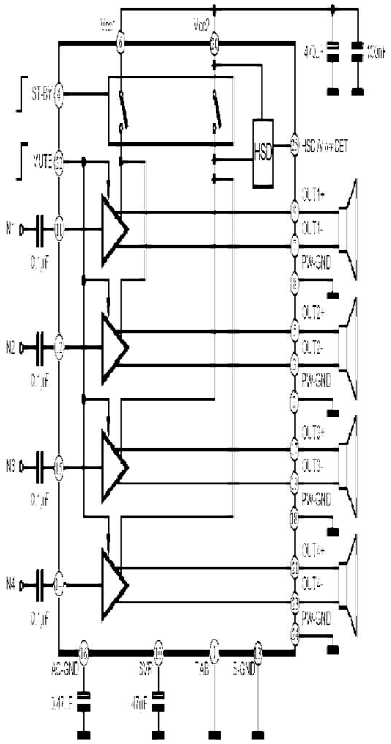
| Pin No. | Port | Descriptions | I/O (V) | (V) |
|---|---|---|---|---|
| 1-4 | NC | No connection | - | - |
| 5-31 | SEG5-31 | LCD segment | O | 2.5 |
| 32-40 | NC | No connection | - | - |
| 41-43 | COM1-3 | LCD common | O | 2.5 |
| 44-49 | KS1-6 | Key data output | O | 0.9 |
| 50-54 | KI1-5 | Key data input | I | 0 |
| 55 | TEST | (Connecting to ground) | - | 0 |
| 56 | VDD | +5V power supply | - | 5.1 |
| 57 | VDD1 | Ground through capacitor | - | 3.3 |
| 58 | VDD2 | Ground through capacitor | - | 1.7 |
| 59 | Vss | Ground | - | 0 |
| 60 | OSC | CR oscillator | - | 3.9 |
| 61 | DO | Key data output | O | 4.4 |
| 62 | CE | Chip enable | I | 0 |
| 63 | CLK | LCD clock | I | 0 |
| 64 | DI | LCD data input | I | 0 |

# 11. PACKAGE AND IC BLOCK DIAGRAM

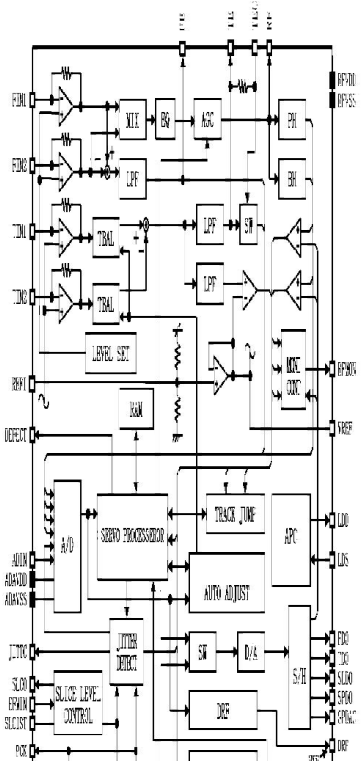
## 11.1. Main Block

**P50:J3CCBB000005**

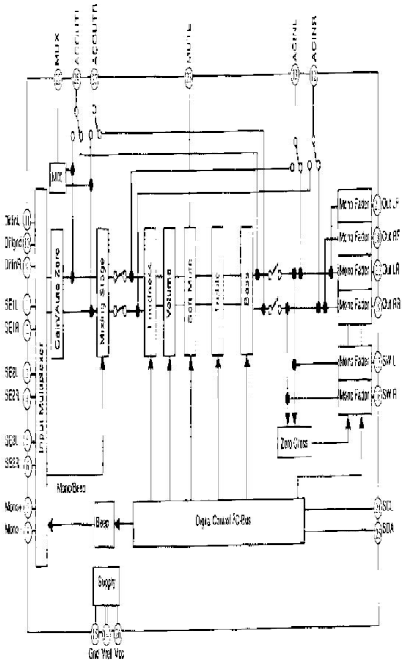
**IC270 : C1EA00000042**



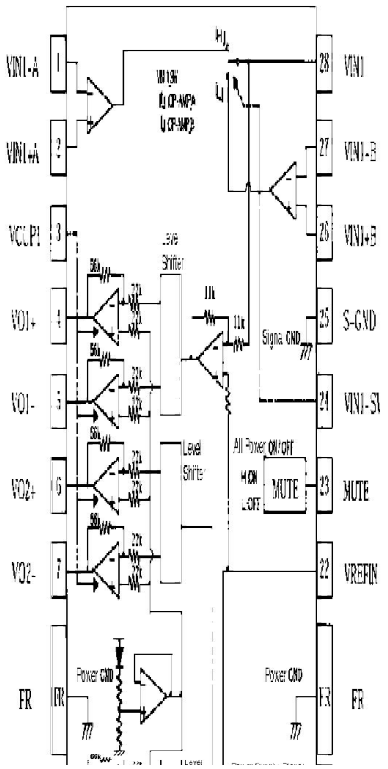

**IC1 : C1BB00001089**



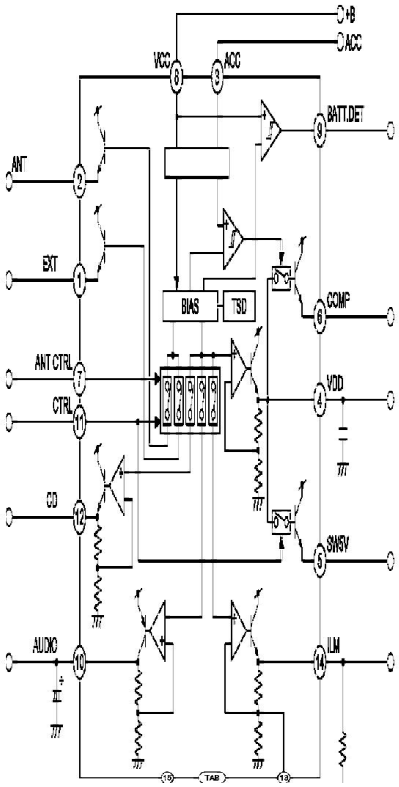

**IC300 : C1BB00000543**



**IC2 : C1BB00001088**




**IC701 : C0DAZHF00004**




# 12. REPLACEMENT PARTS LIST

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| 1. IC's and Transistors | | | |
| MAIN BLOCK [E-4C290] | | | |
| IC1 | C1BB00001089 | IC | T |
| IC2 | C1BB00001088 | IC | T |
| IC270 | C1EA00000042 | IC | T |
| IC300 | C1BB00000543 | IC | T |
| IC601 | LC7237819D07 | IC | T |
| IC701 | C0DAZHF00004 | IC | T |
| P50 | J3CCBB000005 | Tuner | T |
| Q1 | YEAN2SA1317T | Transistor | T |
| Q2 | B1BCCF000013 | Transistor | T |
| Q50 | B1GDCFEH0001 | Transistor | T |
| Q53 | B1AAEC000002 | Transistor | T |
| Q54 | B1GDCFEH0001 | Transistor | T |
| Q401 | B1CAHF000003 | Transistor | T |
| Q701 | YEANKRA104M | Transistor | T |
| Q702 | B1GACFCJ0003 | Transistor | T |
| | | | |
| DISPLAY BLOCK [E-4C291] | | | |
| IC901 | YEAMLC75853NW | LCD DRIVER IC | T |
| Q901 | YEANKRA102S | Transistor | T |
| | | | |
| 2. Diodes | | | |
| MAIN BLOCK [E-4C290] | | | |
| D604 | B0ACCK000005 | Diode | T |
| D605 | B0ACCK000005 | Diode | T |
| D610 | B0AADL000002 | Diode | T |
| D706 | B0BC6R700006 | Diode | T |
| D707 | YEADSM5819A | Diode | T |
| D710 | YEAD1N4005ST | Silicon Diode | T |
| D714 | YEAD1N4005ST | Silicon Diode | T |
| D961 | YEAD1N4005ST | Silicon Diode | T |
| D962 | YEAD1N4005ST | Silicon Diode | T |
| D963 | YEAD1N4005ST | Silicon Diode | T |
| D964 | YEAD1N4005ST | Silicon Diode | T |
| D965 | YEAD1N4005ST | Silicon Diode | T |
| D966 | YEAD1N4005ST | Silicon Diode | T |
| D967 | YEAD1N4005ST | Silicon Diode | T |
| D968 | YEAD1N4005ST | Silicon Diode | T |
| D708 | YEAD1N5404FT | Diode | T |
| | | | |
| DISPLAY BLOCK [E-4C291] | | | |
| D900 | B3AAB0000213 | CHIP LED (WHITE) | T |
| D907 | MAZ80560ML | Zener Diode | T |
| D919 | YEADSPADB01 | LED (BLUE) | T |
| D920 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D921 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D922 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D923 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D924 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D925 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D926 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D927 | YEADSPADG01 | LED (YELLOW GREEN) | T |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| D928 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D929 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| D930 | YEADSPADG01 | LED (YELLOW GREEN) | T |
| | | | |
| 3. Capacitors | | | |
| MAIN BLOCK [E-4C290] | | | |
| C1 | F2A1A330A352 | Electrolytic 33pF 10WV | T |
| C2 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C3 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C4 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C5 | F1J1H102A733 | Ceramic 1000pF 50WV | T |
| C6 | EEAFC0J560H | Electrolytic 56PF 6.3WV | T |
| C7 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C8 | ECEA1AKA221IV | Electrolytic 220PF 10WV | T |
| C9 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C10 | F2A0J101A049 | Electrolytic 100pF 6.3WV | T |
| C11 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C12 | F1J1H470A732 | Ceramic 47pF 50WV | T |
| C13 | F1J1H473A733 | Ceramic 0.047MFD 50WV | T |
| C14 | F1J1H472A733 | Ceramic 0.0047MFD 50WV | T |
| C15 | F2A1C100A041 | Electrolytic 10pF 16WV | T |
| C16 | F1J1H224A784 | Chip 0.22MFD 50WV | T |
| C17 | F1J1H470A732 | Ceramic 47pF 50WV | T |
| C18 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C19 | F2A0J101A020 | Electrolytic 100pF 6.3WV | T |
| C20 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C21 | F2A0J101A049 | Electrolytic 100pF 6.3WV | T |
| C22 | F2A0J101A020 | Electrolytic 100pF 6.3WV | T |
| C23 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C24 | F2A0J331A020 | Electrolytic 330pF 6.3WV | T |
| C25 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C26 | F1J1H561A733 | Ceramic 560pF 50WV | T |
| C33 | ECEA0JKS470IV | Electrolytic 47PF 6.3WV | T |
| C34 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C35 | F1J1H473A733 | Ceramic 0.047MFD 50WV | T |
| C36 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C37 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C38 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C39 | F2A0J101A049 | Electrolytic 100pF 6.3WV | T |
| C40 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C44 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C45 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C46 | F2A0J101A049 | Electrolytic 100pF 6.3WV | T |
| C47 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C48 | F1J1H221A733 | Chip 220pF 50WV | T |
| C49 | F1J1H222A733 | Chip 2200pF 50WV | T |
| C50 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C51 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C52 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C54 | F3F1D105A042 | Ceramic 1MFD 20WV | T |
| C61 | F1J1H470A732 | Ceramic 47pF 50WV | T |
| C65 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C72 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C73 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C74 | F1J1H273A733 | Chip 0.027MFD 50WV | T |
| C75 | F1J1H273A733 | Chip 0.027MFD 50WV | T |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C76 | F1K1E223A069 | Ceramic 0.022MFD 25WV | T |
| C77 | F1J1H123A733 | Ceramic 0.012MFD 50WV | T |
| C78 | F1J1H682A733 | Ceramic 6800pF 50WV | T |
| C79 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C106 | ECEA1AKA221IV | Electrolytic 220PF 10WV | T |
| C107 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C108 | ECQV1H683JL2 | Plastic Film 0.068MFD 50WV | T |
| C209 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| C215 | F2A1C100A041 | Electrolytic 10pF 16WV | T |
| C216 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C217 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C218 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C219 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C220 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C221 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C249 | F1J1H222A733 | Chip 2200pF 50WV | T |
| C250 | F1J1H222A733 | Chip 2200pF 50WV | T |
| C271 | ECQV1H224JL2 | Plastic Film 0.22MFD 50WV | T |
| C272 | ECQV1H224JL2 | Plastic Film 0.22MFD 50WV | T |
| C290 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C291 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C294 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C295 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C320 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C349 | F1J1H222A733 | Chip 2200pF 50WV | T |
| C350 | F1J1H222A733 | Chip 2200pF 50WV | T |
| C371 | ECQV1H224JL2 | Plastic Film 0.22MFD 50WV | T |
| C372 | ECQV1H224JL2 | Plastic Film 0.22MFD 50WV | T |
| C380 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C600 | F1J1H220A732 | Chip 22pF 50WV | T |
| C601 | F1J1H220A732 | Chip 22pF 50WV | T |
| C602 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C603 | ECA0JM102J | Electrolytic 1000PF 6.3WV | T |
| C605 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C607 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C608 | F1K1H101A153 | Ceramic 100pF 50WV | T |
| C610 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C611 | F1J1H102A733 | Ceramic 1000pF 50WV | T |
| C612 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C620 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C621 | F1K1H103A116 | Ceramic 0.01MFD 50WV | T |
| C622 | ECUV105K16AT | Ceramic 1MFD 16WV | T |
| C631 | F2A1C100A041 | Electrolytic 10pF 16WV | T |
| C702 | EEAFC1A820H | Electrolytic 82PF 10WV | T |
| C703 | F1K1H103A116 | Ceramic 0.01MFD 50WV | T |
| C704 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C705 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C706 | ECEA1CKA101IV | Electrolytic 100PF 16WV | T |
| C707 | F1K1H103A116 | Ceramic 0.01MFD 50WV | T |
| C708 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C710 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C713 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C714 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C715 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C716 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C718 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C720 | ECA1CPX222L | Electrolytic 2200PF 16WV | T |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| C721 | F2A1H2R2A407 | Electrolytic 2.2pF 50WV | T |
| C722 | F2A1H1R0A407 | Electrolytic 1pF 50WV | T |
| C727 | F2A1A101A354 | Electrolytic 100pF 10WV | T |
| C802 | ECEA1AKA221IV | Electrolytic 220PF 10WV | T |
| C901 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C902 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| C903 | F1J1H821A733 | Ceramic 820pF 50WV | T |
| C908 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| C909 | F1J1H103A733 | Ceramic 0.01MFD 50WV | T |
| | | | |
| CD INTERFACE BLOCK [E-4C288] | | | |
| C1 | F1J1H104A036 | Ceramic 0.1MFD 50WV | T |
| 4. Resistors | | | |
| MAIN BLOCK [E-4C290] | | | |
| J4 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J13 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J18 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J19 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J21 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J28 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J29 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J30 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J31 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J60 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J61 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J62 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J200 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J208 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J210 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J217 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J226 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J230 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J232 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J235 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J244 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J246 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J247 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J248 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J260 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J269 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J270 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J272 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J273 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J274 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J276 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J277 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J278 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J281 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J282 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J283 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J284 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J285 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J286 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J287 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J288 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| J293 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J294 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J295 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J297 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J300 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J307 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J308 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J309 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J312 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J317 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J325 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J331 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J332 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J333 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J334 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J335 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J336 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J337 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J340 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J341 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J342 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J343 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J344 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J345 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J346 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J348 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J349 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J350 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J351 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J352 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J400 | D0GD221JA017 | Chip 220 ohms 1/10W | T |
| J401 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J502 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J601 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J602 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J604 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J607 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J610 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J611 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J613 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J616 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J617 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J618 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| J701 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J801 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J802 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J804 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J806 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J807 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J808 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J809 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J810 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J811 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J817 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J818 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J819 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J820 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R1 | D0AE823JA131 | Chip 82k ohms 1/4W | T |
| R2 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R3 | D0AE183JA131 | Chip 18k ohms 1/4W | T |
| R4 | D0AE183JA131 | Chip 18k ohms 1/4W | T |
| R5 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R6 | D0AE823JA131 | Chip 82k ohms 1/4W | T |
| R7 | D0AE470JA131 | Chip 47 ohms 1/4W | T |
| R8 | D0GD3R3JA052 | Chip 3.3 ohms 1/10W | T |
| R9 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R10 | D0GD331JA017 | Chip 330 ohms 1/10W | T |
| R11 | D0GD273JA017 | Chip 27k ohms 1/10W | T |
| R12 | D0GD622JA017 | Chip 6.2k ohms 1/10W | T |
| R13 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| R21 | D0GD820JA017 | Chip 82 ohms 1/10W | T |
| R22 | D0GD681JA017 | Chip 680 ohms 1/10W | T |
| R23 | D0GD681JA017 | Chip 680 ohms 1/10W | T |
| R24 | D0GD123JA017 | Chip 12k ohms 1/10W | T |
| R25 | D0GD122JA017 | Chip 1.2k ohms 1/10W | T |
| R26 | D0GF820JA029 | Chip 68k ohms 1/9W | T |
| R36 | D0GD272JA017 | Chip 2.7k ohms 1/10W | T |
| R40 | D0AE103JA131 | Chip 10k ohms 1/4W | T |
| R41 | D0GD622JA017 | Chip 6.2k ohms 1/10W | T |
| R42 | D0GD333JA017 | Chip 33k ohms 1/10W | T |
| R43 | D0GD333JA017 | Chip 33k ohms 1/10W | T |
| R48 | D0AE223JA131 | Chip 22k ohms 1/4W | T |
| R49 | D0AE103JA131 | Chip 10k ohms 1/4W | T |
| R50 | D0GF223JA017 | Chip 22k ohms 1/8W | T |
| R51 | D0GD682JA017 | Chip 6.8k ohms 1/10W | T |
| R52 | D0AE223JA131 | Chip 22k ohms 1/4W | T |
| R53 | ERJ6GEYJ685V | Chip 68M ohms 1/10W | T |
| R59 | D0AZ102JA008 | Chip 1k ohms 1/6W | T |
| R60 | ERJ8GEYJ5R6V | Chip 5.6 ohms 1/8W | T |
| R61 | D0GDR00JA017 | Chip 0 ohms 1/10W | T |
| R62 | D0GD101JA017 | Chip 100 ohms 1/10W | T |
| R66 | D0GD393JA017 | Chip 39k ohms 1/10W | T |
| R67 | D0GD123JA017 | Chip 12k ohms 1/10W | T |
| R68 | D0GD123JA017 | Chip 12k ohms 1/10W | T |
| R69 | D0GF221JA017 | Chip 220 ohms 1/8W | T |
| R70 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R102 | D0GF511JA017 | Chip 510 ohms 1/8W | T |
| R103 | D0GD512JA017 | Chip 5k ohms 1/8W | T |
| R104 | D0GD331JA017 | Chip 330 ohms 1/10W | T |
| R105 | D0AZ100JA008 | Chip 10 ohms 1/6W | T |
| R208 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R209 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R241 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R242 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R261 | D0GD181JA017 | Chip 180 ohms 1/10W | T |
| R262 | D0GF181JA017 | Chip 180 ohms 1/8W | T |
| R271 | D0GD561JA017 | Chip 560 ohms 1/10w | T |
| R272 | D0GD561JA017 | Chip 560 ohms 1/10w | T |
| R280 | ERD25TJ562T | Carbon 5.6k ohms 1/4W | T |
| R284 | ERD25TJ562T | Carbon 5.6k ohms 1/4W | T |
| R341 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R342 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R361 | D0GF181JA017 | Chip 180 ohms 1/8W | T |
| R362 | D0GD181JA017 | Chip 180 ohms 1/10W | T |

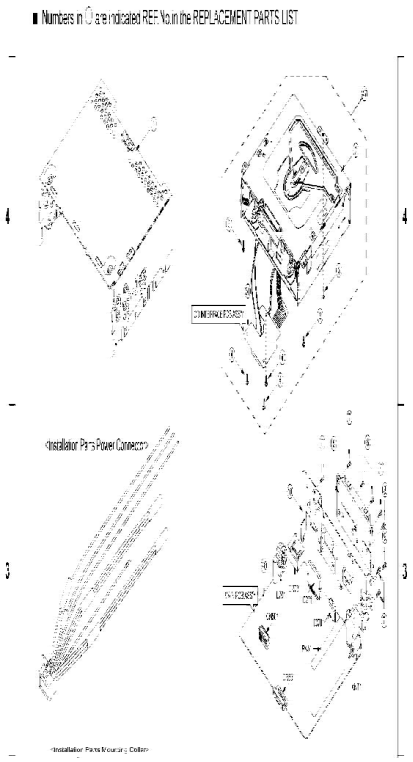
| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R371 | D0GD561JA017 | Chip 560 ohms 1/10w | T |
| R372 | D0GD561JA017 | Chip 560 ohms 1/10w | T |
| R601 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R602 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R604 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R606 | D0AZ103JA008 | Chip 10k ohms 1/6W | T |
| R607 | D0AZ103JA008 | Chip 10k ohms 1/6W | T |
| R608 | D0GD104JA017 | Chip 100k ohms 1/10W | T |
| R609 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R610 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R611 | D0AZ102JA008 | Chip 1k ohms 1/6W | T |
| R612 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R613 | D0AZ102JA008 | Chip 1k ohms 1/6W | T |
| R616 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R618 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R619 | D0GF102JA014 | Chip 1k ohms 1/8W | T |
| R622 | D0AZ473JA008 | Chip 47k ohms 1/6W | T |
| R624 | D0GF333JA017 | Chip 3.3k ohms 1/9W | T |
| R625 | D0AZ102JA008 | Chip 1k ohms 1/6W | T |
| R626 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R627 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R628 | D0GF473JA017 | Chip 47k ohms 1/10W | T |
| R629 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R634 | D0AZ682JA008 | Chip 6.8k ohms 1/6W | T |
| R636 | D0GD223JA017 | Chip 22k ohms 1/10W | T |
| R640 | D1HB1024A031 | Chip 1k ohms 1/16W | T |
| R641 | D1HB1024A031 | Chip 1k ohms 1/16W | T |
| R642 | D1HB1024A031 | Chip 1k ohms 1/16W | T |
| R652 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R654 | D0GF473JA017 | Chip 47k ohms 1/10W | T |
| R660 | D0AZ102JA008 | Chip 1k ohms 1/6W | T |
| R661 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R662 | D0AZ104JA008 | Chip 100k ohms 1/6W | T |
| R663 | D0GD104JA017 | Chip 100k ohms 1/10W | T |
| R682 | D0GD104JA017 | Chip 100k ohms 1/10W | T |
| R683 | ERJ6GEYJ475V | Chip 47M ohms 1/10W | T |
| R701 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R702 | D0GD153JA017 | Chip 15k ohms 1/10W | T |
| R703 | D0AE102JA131 | Chip 1k ohms 1/4W | T |
| R705 | D0GD333JA017 | Chip 33k ohms 1/10W | T |
| R706 | D0GD473JA017 | Chip 47k ohms 1/10W | T |
| R709 | D0GF332JA017 | Chip 3.3k ohms 1/8W | T |
| R710 | D0GD332JA017 | Chip 3.3k ohms 1/10W | T |
| R711 | ERDS2TJ823T | Carbon8.2k ohms 1/4W | T |
| R712 | D0GD104JA017 | Chip 100k ohms 1/10W | T |
| R713 | D0GF223JA017 | Chip 22k ohms 1/8W | T |
| R992 | D0GD103JA017 | Chip 10k ohms 1/10W | T |
| R993 | D0GD163JA017 | Chip 16k ohms 1/10W | T |
| Z52 | D4ZZ00000024 | Surge Protector | T |
| | | | |
| DISPLAY BLOCK [E-4C291] | | | |
| R901 | D0GD272JA017 | Chip 2.7k ohms 1/10W | T |
| R902 | D0GD683JA017 | Chip 68k ohms 1/10W | T |
| R903 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R904 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R905 | D0GD102JA017 | Chip 1k ohms 1/10W | T |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| R908 | D0GD681JA017 | Chip 680 ohms 1/10W | T |
| R909 | D0GD102JA017 | Chip 1k ohms 1/10W | T |
| R910 | D0GD4R7JA056 | Chip 4.7 ohms 1/10W | T |
| R921 | D0GD221JA017 | Chip 220 ohms 1/10W | T |
| R922 | D0GD221JA017 | Chip 220 ohms 1/10W | T |
| R923 | D0GD221JA017 | Chip 220 ohms 1/10W | T |
| R924 | D0GD431JA017 | Chip 430 ohms 1/10W | T |
| R925 | D0GD241JA017 | Chip 240 ohms 1/10W | T |
| | | | |
| CD INTERFACE BLOCK [E-4C288] | | | |
| J30 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J31 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J32 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J33 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J34 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J35 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J36 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| J37 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| | | | |
| 5. Connectors | | | |
| MAIN BLOCK [E-4C290] | | | |
| CN601 | YEAE012475A | Connector | T |
| CN602 | K1KA22A00001 | Connector | T |
| CN700 | K1FA116B0028 | Connector | T |
| | | | |
| DISPLAY BLOCK [E-4C291] | | | |
| CN901 | YEAE4CCN074 | Connector | T |
| | | | |
| CD INTERFACE BLOCK [E-4C288] | | | |
| CN1 | YEAE4CCN075 | Connector | T |
| CN2 | YEAE4CCN057A | Connector | T |
| | | | |
| 6. Electric Parts | | | |
| SWITCHES | | | |
| SW901 | K0H1BA000445 | Tack Swich | T |
| SW902 | K0H1BA000445 | Tack Swich | T |
| SW903 | K0H1BA000445 | Tack Swich | T |
| SW904 | K0H1BA000445 | Tack Swich | T |
| SW905 | K0H1BA000445 | Tack Swich | T |
| SW906 | K0H1BA000445 | Tack Swich | T |
| SW907 | K0H1BA000445 | Tack Swich | T |
| SW908 | K0H1BA000445 | Tack Swich | T |
| SW909 | K0H1BA000445 | Tack Swich | T |
| SW910 | K0H1BA000445 | Tack Swich | T |
| SW911 | K0H1BA000445 | Tack Swich | T |
| SW912 | K0H1BA000445 | Tack Swich | T |
| SW913 | K0H1BA000445 | Tack Swich | T |
| SW914 | K0H1BA000445 | Tack Swich | T |
| SW915 | K0H1BA000445 | Tack Swich | T |
| SW919 | K0H1BA000445 | Tack Swich | T |
| | | | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| CRYSTAL | | | |
| XL01 | YEXL16M9X54A | Ceramic Filter | T |
| XL601 | H0A450000001 | Crystal | T |
| | | | |
| COILS | | | |
| L2 | G0C221JA0044 | Axil Coil | T |
| L50 | G0C150JA0044 | Axil Coil | T |
| L52 | G0C8R2JA0044 | Axil Coil | T |
| L61 | G1CR56JA0036 | Coil | T |
| L801 | G1C100J00001 | Coil | T |
| L700 | YETQ024C065V | Choke Coil | T |
| L901 | ERJ8GX0R00V | Chip 0 ohms 1/8W | T |
| | | | |
| VR | | | |
| VR901 | K9AA024A0014 | Encoder | T |
| LCD | | | |
| LCD901 | YEXDCM4C134 | LCD | T |
| | | | |
| 7. Accessories | | | |
| PRINT | | | |
| | YFM284C493CA | Operating Instructions | T |
| | YFM284C494CA | Installation Instructions | T |
| | | | |
| INSTALLATION PARTS | | | |
| | FX0214C384ZA | Escape Case | T |
| | ZZCORD-1333U | Power Connector | T |
| | ZZBISC1101U-J | Screw Kit | T |
| | | | |
| 8. Mechanical Parts | | | |
| MISCELLANEOUS | | | |
| ANT1 | YAA104C700ZA | ANT Jack | T(3-C) |
| 1 | YFA034C053CA | Upper Cover | T(4-B) |
| 2 | YGFD044C002 | CD Deck | T(4-C) |
| 3 | XTB26+5FFN | Screw | T(4-C) |
| 4 | XTW2+5FFN | Screw | T(4-C) |
| 5 | YFF014C055CA | Heat Sink | T(3-C) |
| 6 | YEJT034C019N | Screw(CUP TIGHT 3X12) | T(3-C) |
| 7 | XTB3+8FFZ | Screw | T(3-C) |
| 8 | YJS064C002FN | Screw | T(3-C) |
| 9 | XTB26+8GFN | Screw | T(3-C) |
| 10 | YFA084C064CA | Rear Plate | T(3-C) |
| 11 | YFC034C012CA | ESC Holder | T(2-C) |
| 12 | YFX054C074CA | Spring (HOOK) | T(2-C) |
| 13 | YEFX9991682B | Release Hook | T(2-C) |
| 14 | YEFS02302 | Dust Felt | T(2-C) |
| 15 | YEFS011113 | Pad | T(2-C) |
| 16 | XTN2+8GFZ | Screw | T(2-C) |
| 17 | YFX054C071CA | Spring (PUSH BUTTON) | T(2-C) |
| 18 | YFE134C491YA | Button (Push) | T(2-C) |
| 19 | YFC034C001CA | ESC Rear Cover | T(2-C) |
| 20 | YFE134C510CA | Button (TUNE/TRACK)Ring | T(2-B) |
| 21 | YFV024C108CA | Sheet | T(2-B) |
| 22 | YFE134C509CA | Button (DM/REP) | T(1-B) |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| 23 | YFX054C072CA | Spring (OPEN) | T(1-B) |
| 24 | YFE134C505CA | Button(RELEASE) | T(1-B) |
| 25 | YFE134C508CA | Button (DISP/EJ) | T(1-B) |
| 26 | YFC034C006CA | ESC Front Cover | T(1-B) |
| 27 | YFX014C091CA | Panel Light (CD) | T(1-B) |
| 28 | YFJ014C164CA | ARC Panel | T(1-B) |
| 29 | YFE134C513CA | Button (4-6) | T(1-B) |
| 30 | YFE134C514CA | Button (SRC/PWR) | T(1-A) |
| 31 | YFX994C126CA | Two-Side Tape | T(1-A) |
| 32 | YFJ014C178CA | Ornament Panel | T(1-A) |
| 33 | YFX014C090CA | Back Light Assy | T(2-B) |
| 34 | YFS014C110CA | Rubber Gum | T(2-B) |
| 36 | YFX214C405CA | LCD Bracket | T(2-B) |
| 37 | YFE134C506CA | Button(BAND/MUTE) | T(2-B) |
| 38 | YFE134C507CA | Button (SQ) | T(2-B) |
| 39 | ESCC1103H-TY | ESC Unit Ass'y | T(2-B)/RTL |
| 40 | YFX054C073CA | Spring (KNOB) | T(1-A) |
| 41 | YFE074C068CA | Vol Knob | T(1-A) |
| 42 | YFE074C069CA | VOL Knob ASSY | T(1-A) |
| 43 | YFE134C512CA | Button (1-3) | T(1-A) |
| 44 | YFC054C079YA | Trim Plate | T(1-A) |
| 45 | YFA054C045ZA | Bottom Cover | T(1-C) |
| 46 | XSB3+6FN | Screw | T(1-C) |
| 47 | AADK288A0-TY | Deck Assy | T(4-C)/RTL |
| 48 | AAPB290B0-TY | Main PCB Ass'y | T(3-B)/RTL |
| 49 | ZZFP-193 | ESC Hold Assy | T(2-C) |
| 50 | AAPC291B0-TY | Display PCB Ass'y | T(2-B)/RTL |
| 51 | APCB288A0-TY | CD Interface PCB Assy | T(4-B)/RTL |

# 13. EXPLODED VIEW (Unit)




# 14. CD PLAYER MECHANICAL PARTS LIST

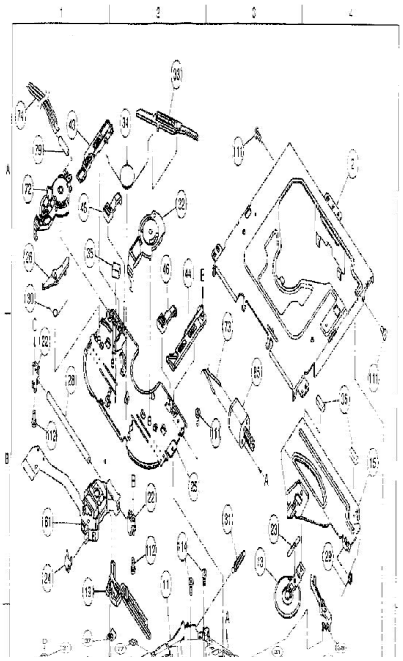
Note:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location type in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (KD) indicates that Retention Time is 1 year for this item. After the discontinuation of assembly in production, the item will continue to be available by a conversion of the type of assembly and in accordance with the new processing sort and product retention. At the end of this period, the assembly will no longer be available.
5. "*" marks in remarks column are indicates supply parts of TRANSCO.
6. Order in lead period is basically six months after the first shipment.
7. "N" marks in remarks column are indicates supply parts as not available and to order the assembly.

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| 1 | 3032 01 36 | FRAME (M2) | N(E-4) |
| 2 | 3032 01 37 | TOP COVER (M2) | N(A-4) |
| 3 | 3032 01 15 | DAMPER F | N(E-3) |
| 4 | 3032 01 16 | DAMPER R | N(D-4) |
| 11 | 3032 05 508 | CHASSIS RIVET ASS'Y(M2) | N(B-2) |
| 12 | 3032 05 504 | CHASSIS PLTAE RIVET ASS'Y(M) | N(C-4) |
| 13 | 3032 05 301 | CLAMPER ASS'Y | N(B-3) |
| 14 | 3032 05 307 | SPINDLE MOTOR (M) ASS'Y | T(D-1) |
| 15 | 3032 05 56 | CLAMPER ARM M | N(B-4) |
| 16 | 3032 05 03 | CHANGE GEAR SPRING | N(D-4) |
| 17 | 3032 05 05 | CHANGE GEAR 2 | N(D-4) |
| 18 | 3032 05 06 | FEED GEAR | N(D-3) |
| 19 | 3032 05 51 | FEED RACK M | N(B-1) |
| 20 | 3032 05 53 | CHANGE LOCK LEVER M | N(D-3) |
| 21 | 3032 05 57 | FEED SW HOLDER (M) | N(C-1) |
| 22 | 3032 05 54 | PU SHAFT HOLDER (M) | N(B-1);<br>N(B-2) |
| 23 | 3032 05 13 | CLAMPER SUB SPRING | N(B-3) |
| 24 | 3032 05 58 | FD SUB HOLDER M | N(B-1) |
| 25 | 3032 05 65 | TOP PLATE (M2) | N(B-2) |
| 26 | 3032 05 19 | SELECT LOCK ARM | N(A-1) |
| 27 | 3032 05 21 | SLIDE HOOK | N(C-4) |
| 28 | 3032 05 55 | PU SHAFT M | N(B-1) |
| 29 | 3032 05 59 | CLAMPER ARM SPRING M | N(B-4) |
| 30 | 3032 05 26 | SELECT LOCK ARM SPRING | N(A-1) |
| 31 | 3032 05 62 | SUSPENSION SPRING MS | N(B-3);<br>N(C-1);<br>N(C-4);<br>N(D-2) |
| 32 | 3032 05 64 | SELECT ARM R (M2) | N(A-2) |
| 33 | 3032 05 30 | LINK PLATE | N(A-2) |
| 34 | 3032 05 36 | LINK PLATE SPRING S | N(A-2) |
| 35 | 3032 05 23 | CUSHION F | N(A-1) |
| 36 | 3032 05 24 | CUSHION R | N(B-4) |
| 37 | 3032 05 63 | FEED SPR PLATE M | N(C-2) |
| 38 | 3032 05 61 | TRIGGER ARM M | N(C-4) |
| 43 | 3032 08 03 | SELECT PLATE L | N(A-1) |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|---|---|---|---|
| 44 | 3032 08 04 | SELECT PLATE R | N(A-2) |
| 45 | 3032 08 05 | SELECT PIECE L | N(A-1) |
| 46 | 3032 08 06 | SELECT PIECE R | N(A-2) |
| 61 | 6904 16 06 | PICK UP RD-DAP005-TN | T(B-1) |
| 62 | 6418 04 07 | DET SW ESE 22MH55 | N(C-1) |
| 72 | 3032 10 02 | MODE SW | T(A-1) |
| 73 | 3032 10 51 | LD WIRE MN | T(B-3);<br>T(C-1) |
| 74 | 3032 10 40 | SW WIRE MN | N(A-1) |
| 75 | 3032 10 39 | SP WIRE MN | N(D-2) |
| 77 | 3032 10 13 | WIRE CLAMPER M | N(C-2);<br>N(C-3);<br>N(D-4);<br>N(E-3) |
| 78 | 3032 10 28 | WIRE TUBE SPM | N(D-2) |
| 79 | 3032 10 29 | WIRE TUBE MSW | N(A-1) |
| 81 | 3032 11 301 | ROLLER SHAFT ASS'Y | N(E-2) |
| 82 | 3032 11 501 | LOADING GEAR PLATE RIVET ASS'Y | N(D-2) |
| 83 | 3032 11 302 | LOADING PLATE ASS'Y | N(C-4) |
| 84 | 3032 11 504 | LOCK ARM RIVET ASS'Y (S) | N(E-1) |
| 85 | 3032 11 305 | LOADING / FEED MOTOR ASS'Y (MB) | T(B-3) |
| 86 | 3032 11 01 | LOADING GEAR 1 | N(D-4) |
| 87 | 3032 11 02 | LOADING GEAR 2 | N(D-3) |
| 88 | 3032 11 03 | LOADING GEAR 3 | N(D-3) |
| 89 | 3032 11 04 | LOADING GEAR 4 | N(D-2) |
| 90 | 3032 11 05 | LOADING GEAR 5 | N(D-2) |
| 91 | 3032 11 06 | LOADING GEAR 6 | N(D-2) |
| 92 | 3032 11 07 | LOADING GEAR 7 | N(D-3) |
| 93 | 3032 11 11 | ROLLER GUIDE | N(D-1);<br>N(E-3) |
| 94 | 3032 11 14 | ROLLER GUIDE SPRING | N(D-1);<br>N(E-1) |
| 95 | 3032 11 16 | DISC STOPPER ARM | N(C-1) |
| 96 | 3032 11 17 | DISC STOP ARM SPRING | N(D-2) |
| 97 | 3032 11 18 | LD GEAR BRACKET | N(D-2) |
| 98 | 3032 11 25 | L SLIDE PLATE | N(D-4) |
| 99 | 3032 11 31 | LOADING PLATE SPRING | N(C-4) |
| 100 | 3032 11 37 | LDG ROLLER (N) | T(D-1) |
| 101 | 3032 11 43 | COLLAR SCREW | N(E-1) |
| 111 | 9P04 20 031 | TAPPING SCREW 2X3 | N(A-3);<br>N(B-3);<br>N(B-4);<br>N(D-2);<br>N(E-4) |
| 112 | 9P04 20 041 | TAPPING SCREW 2X4 | N(B-1);<br>N(B-2) |
| 113 | 9B03 20 041 | TAPPING BIND SCREW 2X4 | N(D-2) |
| 114 | 9C01 17 183 | CAMERA SCREW 1.7X1.8 | N(B-2) |
| 115 | 9C01 20 203 | CAMERA SCREW 2X2 | N(C-3) |
| 116 | 9C45 17 503 | CAMERA TAPPING SCREW P3 M1.7X5 | N(C-1) |
| 121 | 9W01 30 170 | PW 3.5X8X0.3 | N(D-4) |
| 122 | 9W05 13 060 | HLW 1.85X5X0.13 | N(D-1) |
| 123 | 9W07 10 070 | LUMILAR WASHER 3.1X6X0.1 | N(D-1) |
| 124 | 9E01 00 152 | E RING S 1.5 | N(D-4) |
| 125 | 9W01 13 020 | PW 2.1X4X0.13 | N(D-3) |

# 15. EXPLODED VIEW (CD Deck)



# 16. WIRING DIAGRAM

## 16.1. Main Block-1

## 16.2. Main Block-2

16.3. Display Block

16.4. CD Interface Block

17. SCHEMATIC DIAGRAM-1

17.1. Main Block

17.2. Main Block

18. SCHEMATIC DIAGRAM-2

18.1. Display Block

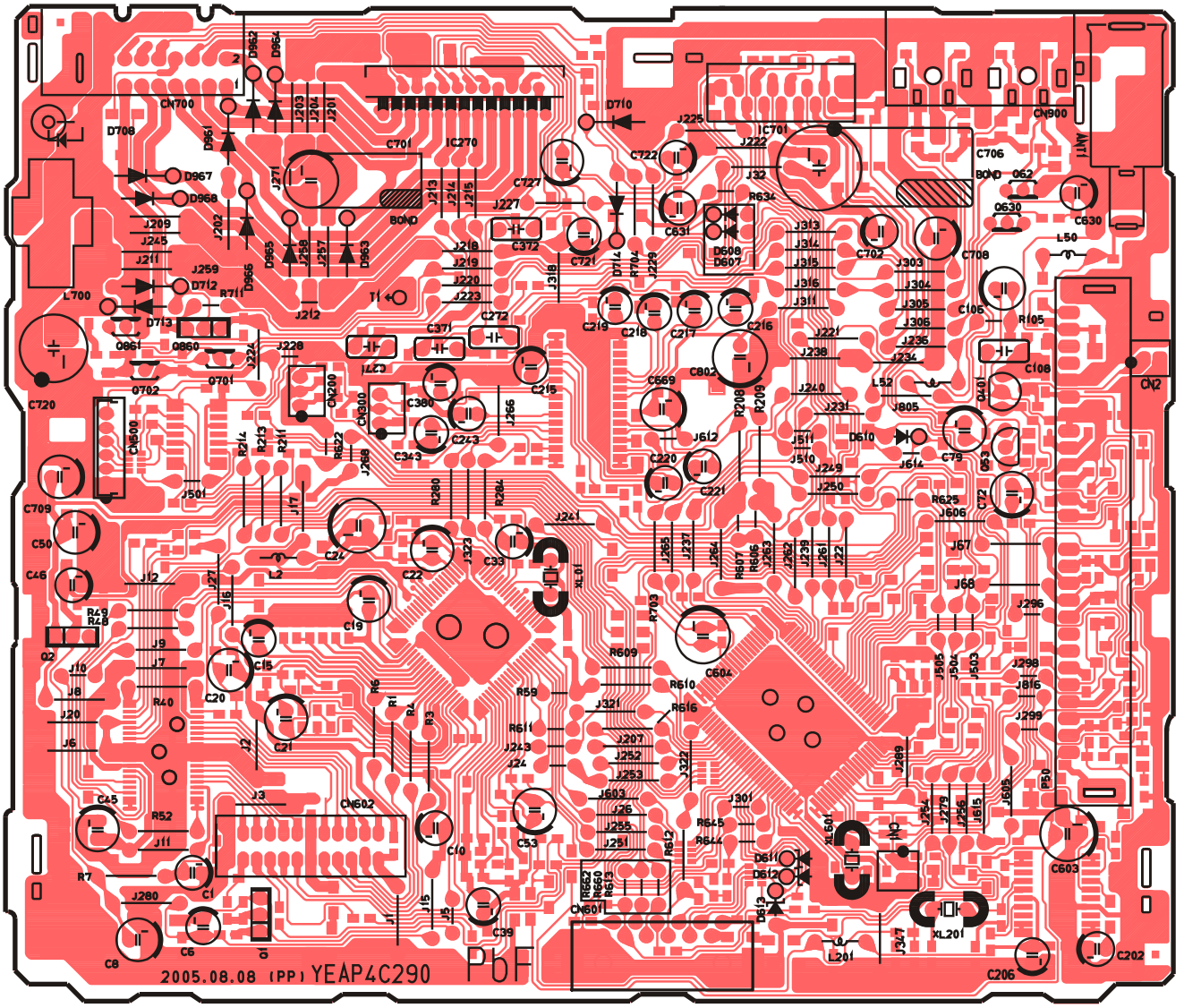
18.2. CD Interface Block

19. SCHEMATIC DIAGRAM for printing with A4 size

19.1. Main Block (Left Side)

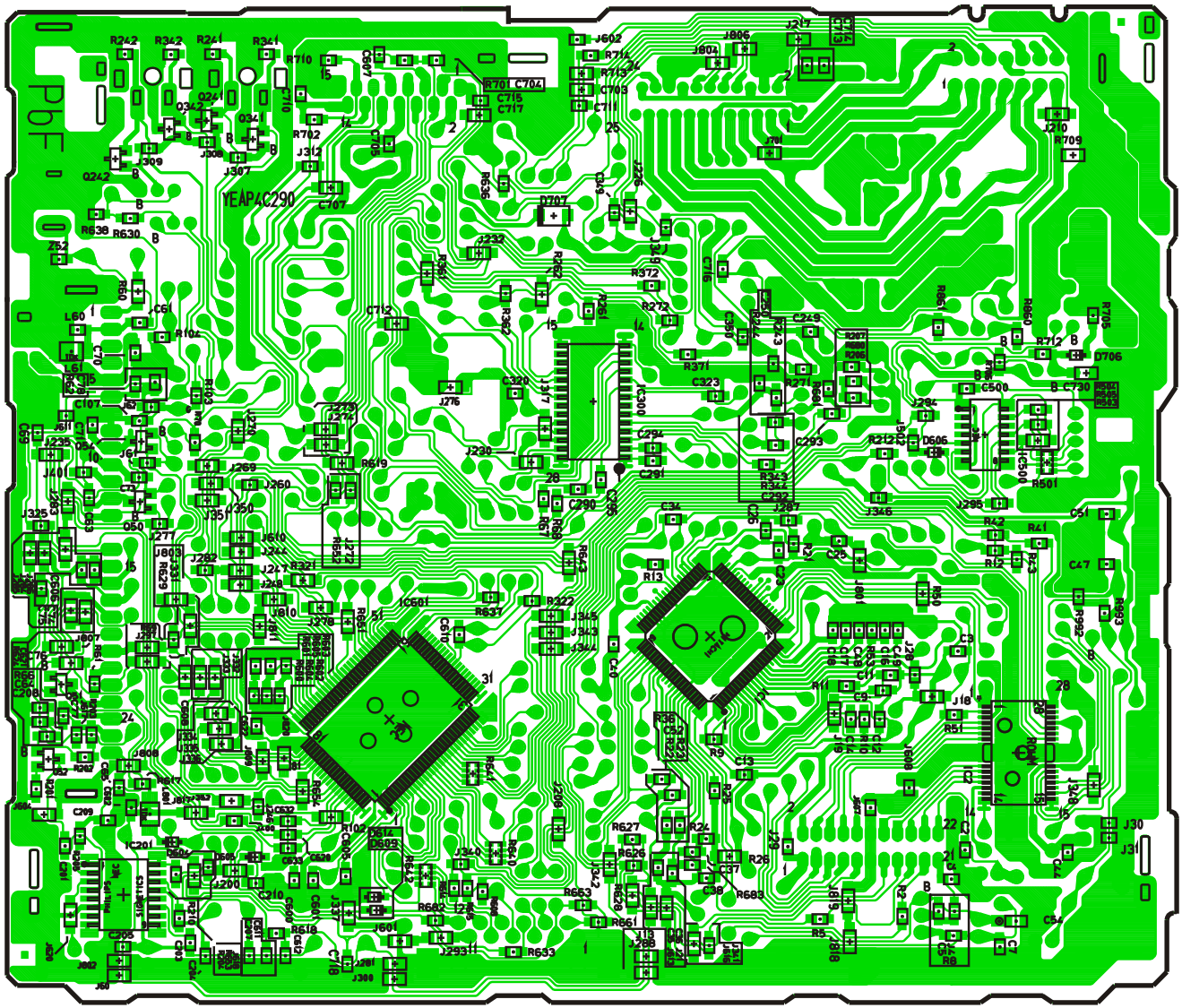
19.2. Main Block (Right Side)

/ Printed in Taiwan / 2005.11



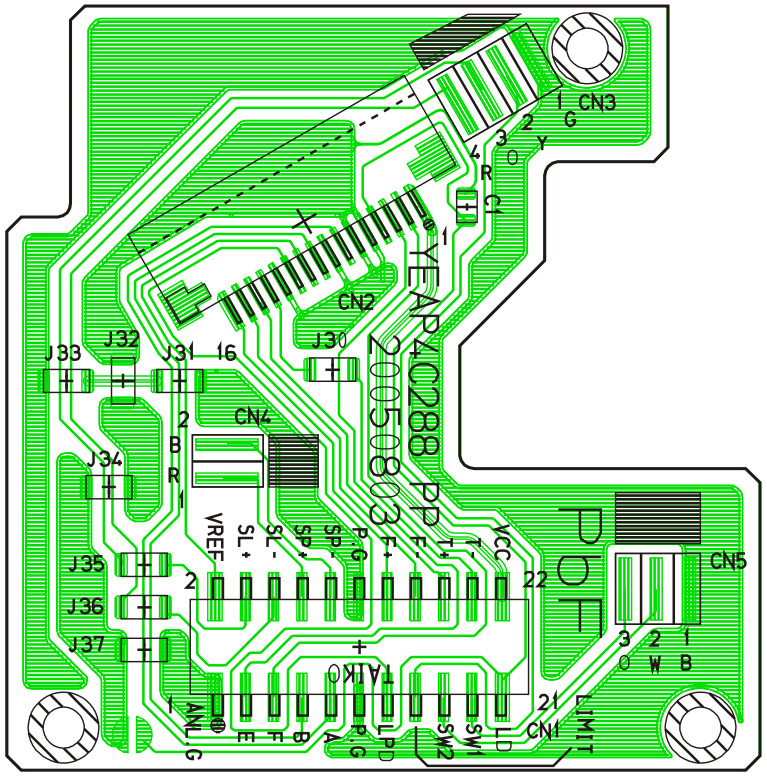

**[E-4C290][TOP VIEW]**

**CQ-C1103U/W/D/H/NE/NW**
**CQ-C1113NE/NW**
**CQ-C1123NE/NW MAIN PCB**



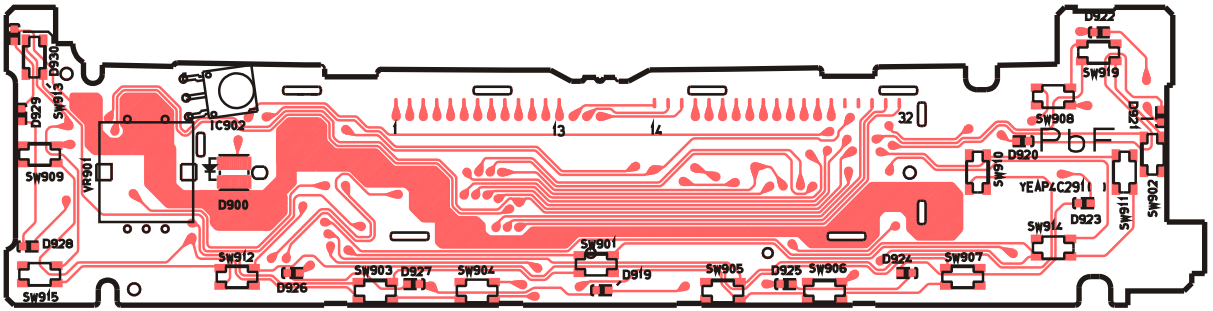
## [E-4C290][BOTTOM VIEW]

**CQ-C1103U/W/NE/NW/D/H**
**CQ-C1113NE/NW**
**CQ-C1123NE/NW MAIN PCB**

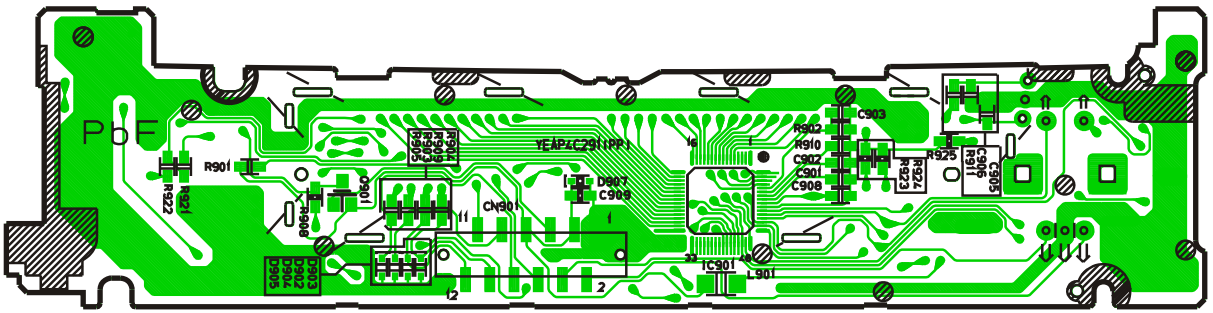



**[E-4C288][BOTTOM VIEW]**

**CQ-C1103U/W/H/D**
**CQ-C1333U/W**
**CQ-C1303U/W/H/D/NE/NW**
**CQ-C1313NE/NW**
**CQ-C1323NE/NW CD INTERFACE PCB**

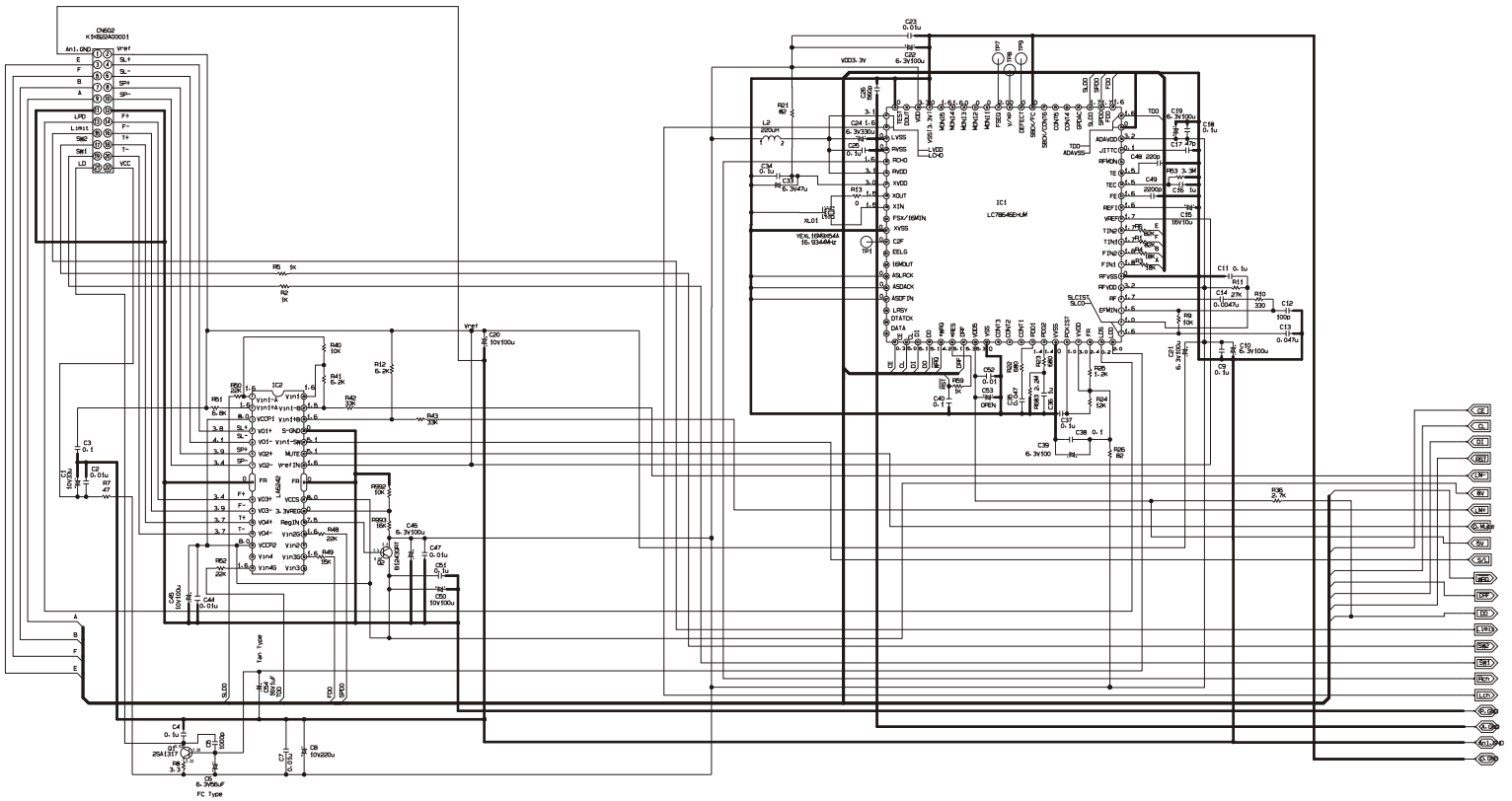



[E-4C291][TOP VIEW]




[E-4C291][BOTTOM VIEW]

# E-4C290



# E-4C290

U/W/H: FAE391-A10
D: FAE391-J10
N: FAE391-E10

FM/AM. TUNER

RDS
For C1103N/13N/23N

CD. C

AUX
FOR C1103D

Front Pre-out

REAR Pre-out

FOR C1103U ONLY

U_only

TO_SERVO_BLOCK

REMO_IN

Ext Mute
N_only

BUZZER_OPEN

| A | N | U.W.H | D |
|---|---|---|---|
| C74 | 0.015 | 0.027 | 0.018 |
| C75 | 0.015 | 0.027 | 0.018 |

| B | N | other |
|---|---|---|
| Q51 | C114EKT | OPEN |
| J803 | 0 | OPEN |
| R617 | 47K | OPEN |

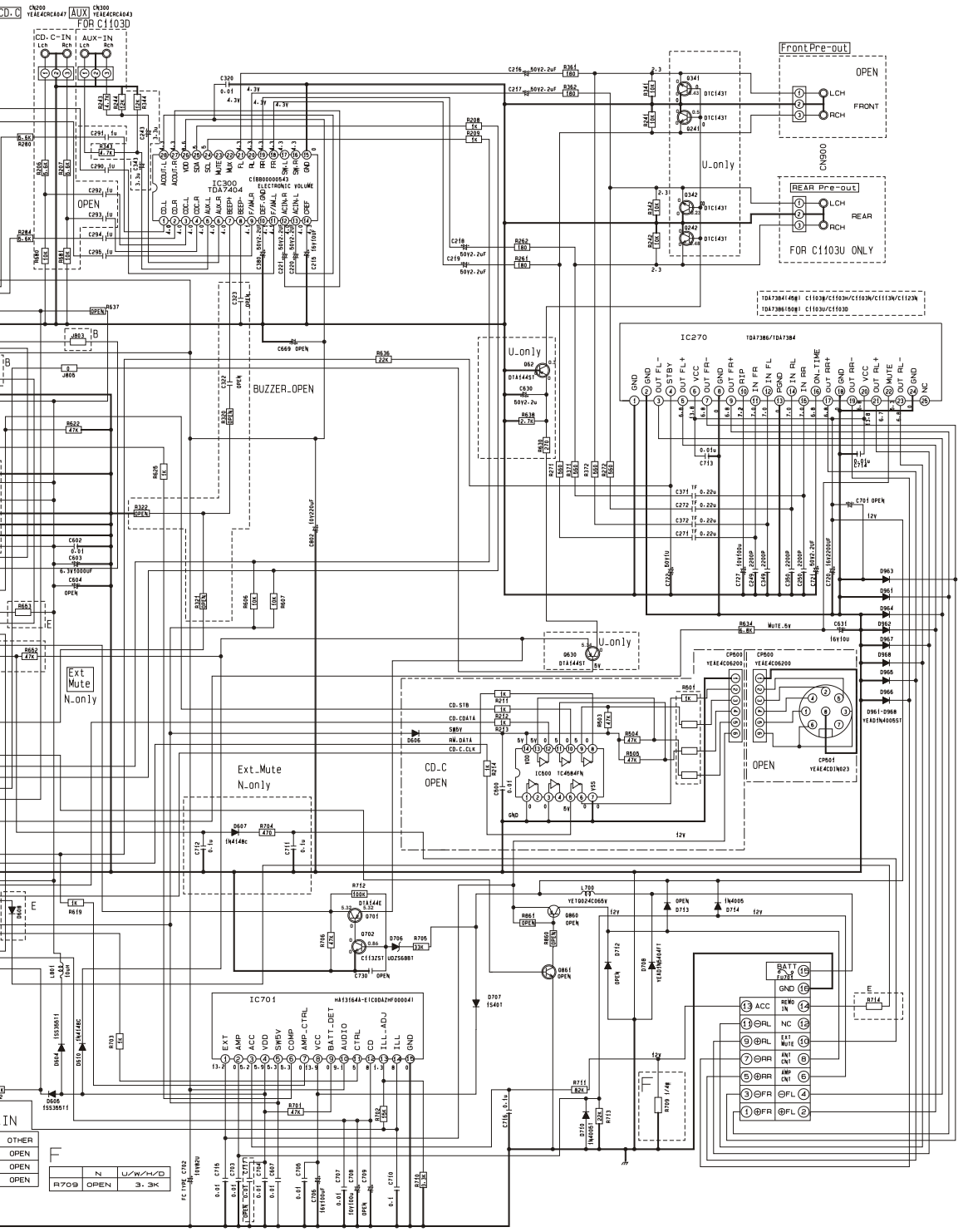
| C | N | U.D.W.H |
|---|---|---|
| C209 | 1000pF | 47K |

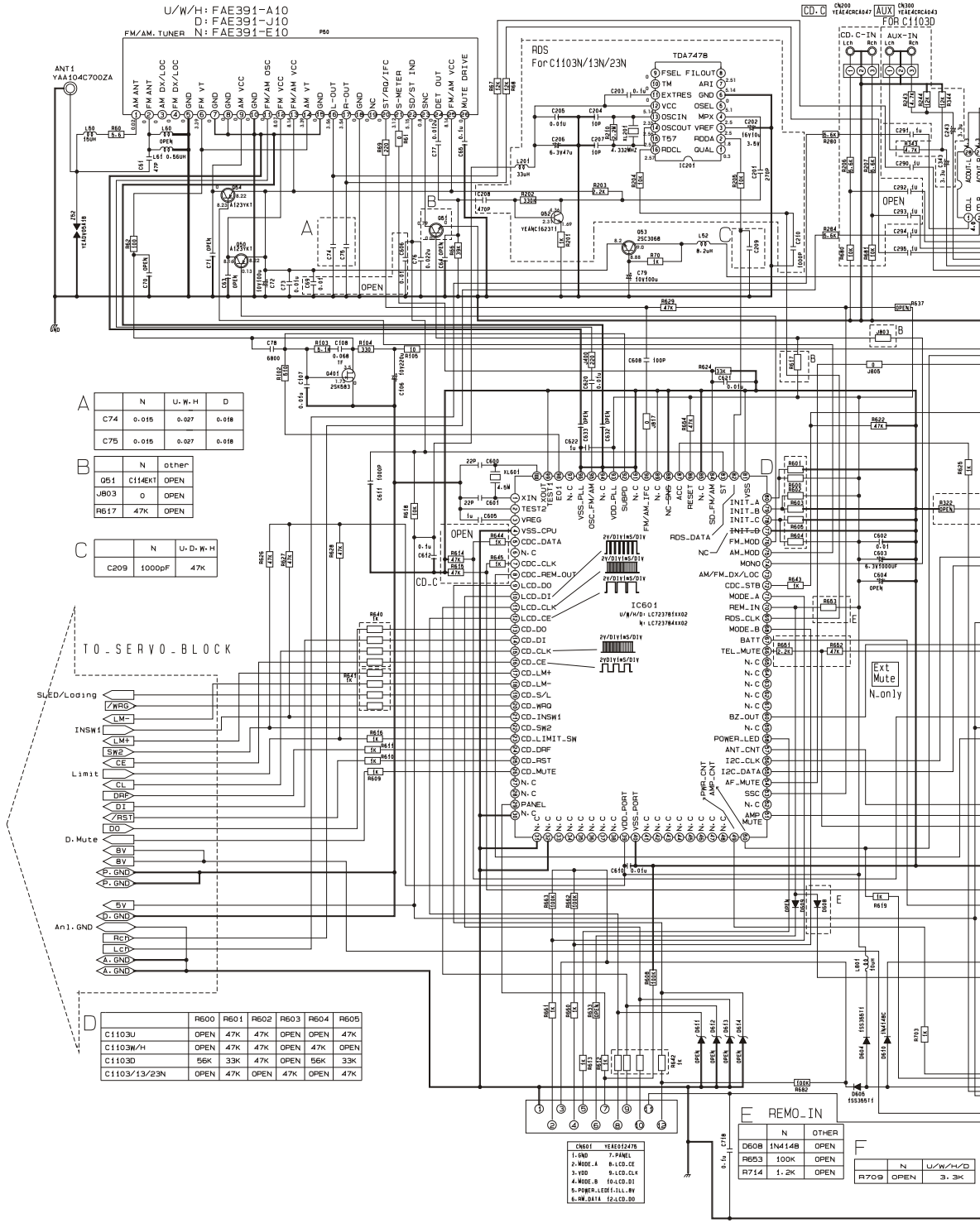
| D | R600 | R601 | R602 | R603 | R604 | R605 |
|---|---|---|---|---|---|---|
| C1103U | OPEN | 47K | 47K | OPEN | OPEN | 47K |
| C1103W/H | OPEN | 47K | 47K | OPEN | 47K | OPEN |
| C1103D | 56K | 33K | 47K | OPEN | 56K | 33K |
| C1103/13/23N | OPEN | 47K | OPEN | 47K | OPEN | 47K |

| E | N | OTHER |
|---|---|---|
| D608 | 1N4148 | OPEN |
| R653 | 100K | OPEN |
| R714 | 1.2K | OPEN |

| F | N | U/W/H/D |
|---|---|---|
| R709 | OPEN | 3.3K |

CN601 YEAE612476
1.GND 7.PANEL
2.MODE_A 8.LCD_CE
3.VDD 9.LCD_CLK
4.MODE_B 10.LCD_DI
5.POWER_LED 11.ILL_8V
6.AM_DATA 12.LCD_DO


CD_C
AUX
FOR C1103D
CD C-IN
AUX-IN
IC300
TDA7404
ELECTRONIC VOLUME
OPEN
BUZZER_OPEN
U_only
IC270
TDA7386/TDA7384
FrontPre-out
REAR Pre-out
FOR C1103U ONLY
CN900
LCH
RCH
FRONT
REAR
Ext_Mute
N_only
CD_C
OPEN
IC701
IC800
BATT
ACC
REMO IN
ANT CNT
AMP CNT
ANT MUTE
MUTE
GND
NC
OTHER
OPEN
OPEN
OPEN
R709
3.3K




| A | N | U.W.H | D |
|---|---|---|---|
| C74 | 0.015 | 0.027 | 0.018 |
| C75 | 0.015 | 0.027 | 0.018 |

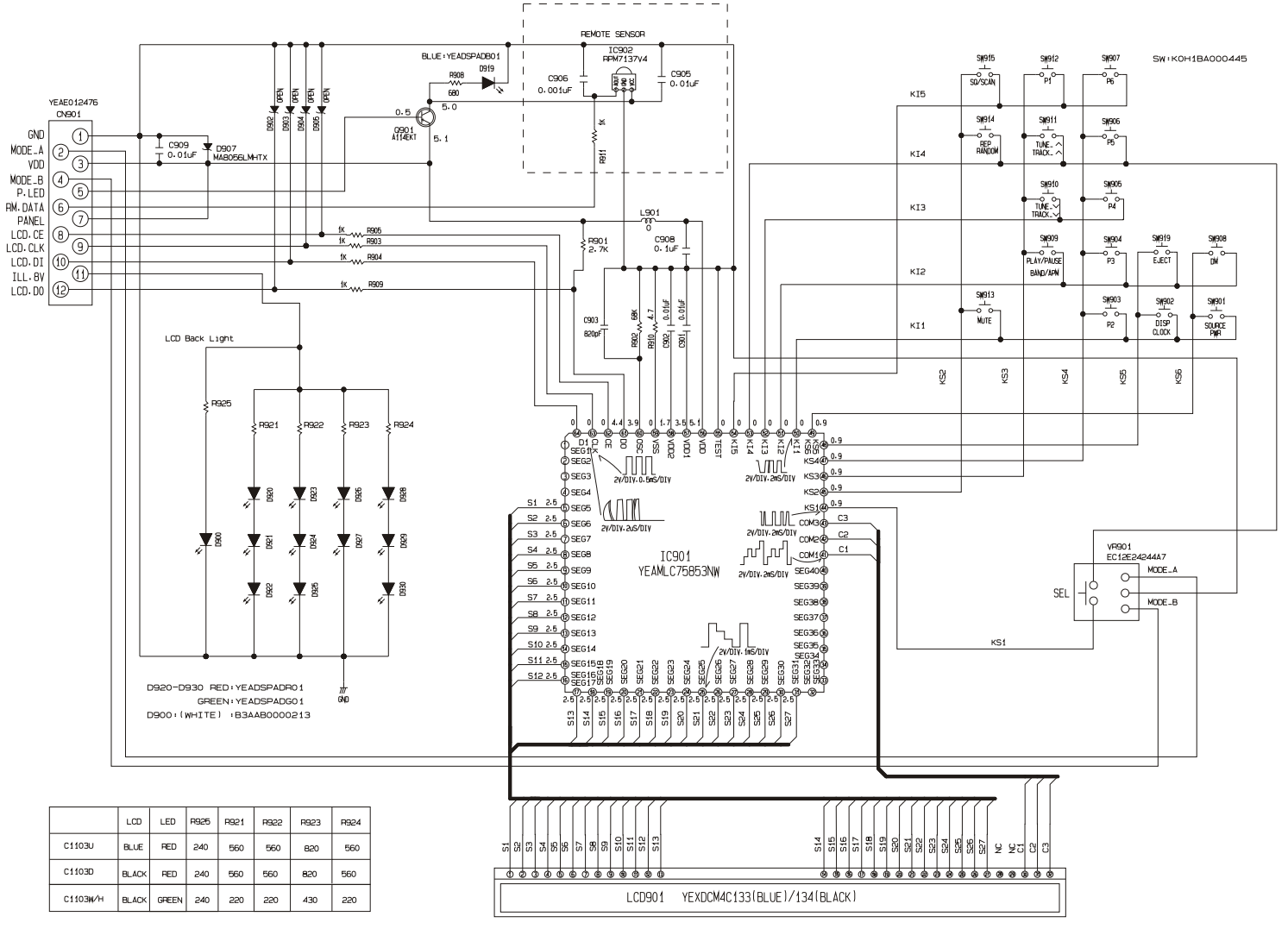
| B | N | other |
|---|---|---|
| Q51 | C114EKT | OPEN |
| J803 | 0 | OPEN |
| R617 | 47K | OPEN |

| C | N | U.D.W.H |
|---|---|---|
| C209 | 1000pF | 47K |

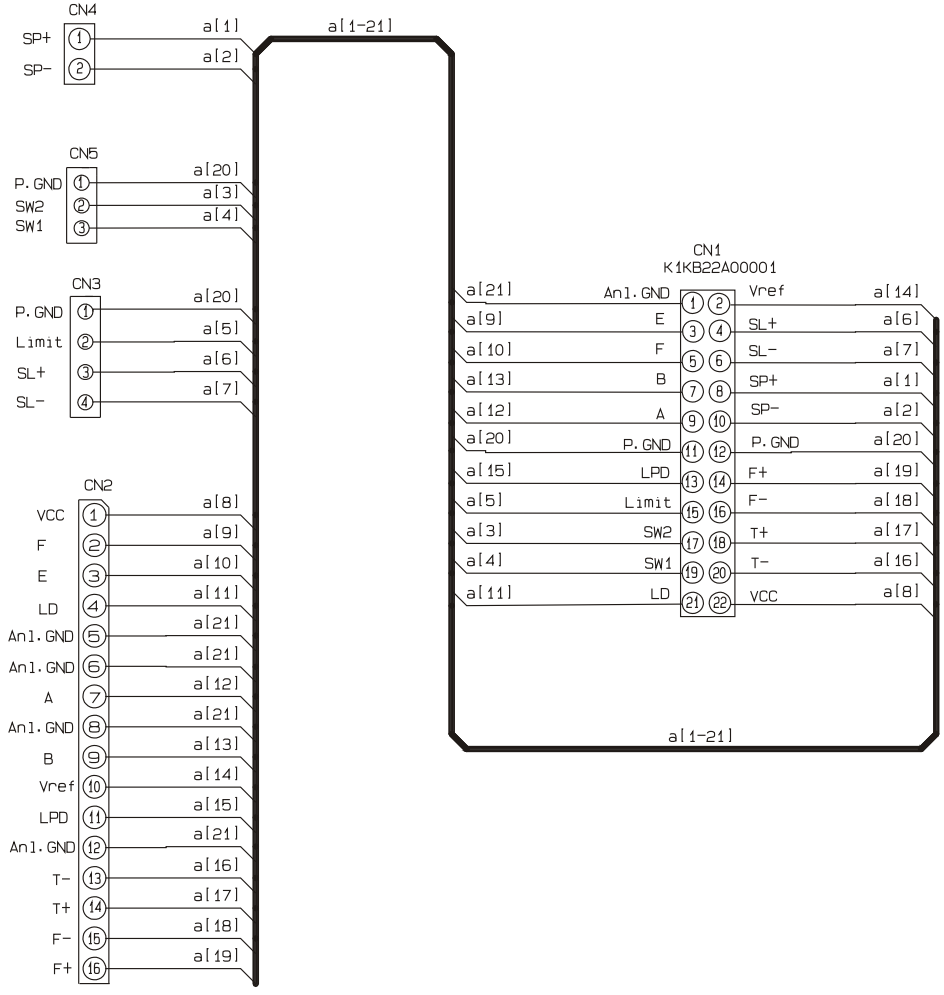
| D | R600 | R601 | R602 | R603 | R604 | R605 |
|---|---|---|---|---|---|---|
| C1103U | OPEN | 47K | 47K | OPEN | OPEN | 47K |
| C1103W/H | OPEN | 47K | 47K | OPEN | 47K | OPEN |
| C1103D | 56K | 33K | 47K | OPEN | 56K | 33K |
| C1103/13/23N | OPEN | 47K | OPEN | 47K | OPEN | 47K |

| E | N | OTHER |
|---|---|---|
| D608 | 1N4148 | OPEN |
| R653 | 100K | OPEN |
| R714 | 1.2K | OPEN |

| F | N | U/W/H/D |
|---|---|---|
| R709 | OPEN | 3.3K |




| | LCD | LED | R925 | R921 | R922 | R923 | R924 |
|---|---|---|---|---|---|---|---|
| C1103U | BLUE | RED | 240 | 560 | 560 | 820 | 560 |
| C1103D | BLACK | RED | 240 | 560 | 560 | 820 | 560 |
| C1103W/H | BLACK | GREEN | 240 | 220 | 220 | 430 | 220 |


CN4
SP+
SP-
a[1]
a[2]
CN5
P.GND
SW2
SW1
a[20]
a[3]
a[4]
CN3
P.GND
Limit
SL+
SL-
a[20]
a[5]
a[6]
a[7]
CN2
VCC
F
E
LD
Anl.GND
Anl.GND
A
Anl.GND
B
Vref
LPD
Anl.GND
T-
T+
F-
F+
a[8]
a[9]
a[10]
a[11]
a[21]
a[21]
a[12]
a[21]
a[13]
a[14]
a[15]
a[21]
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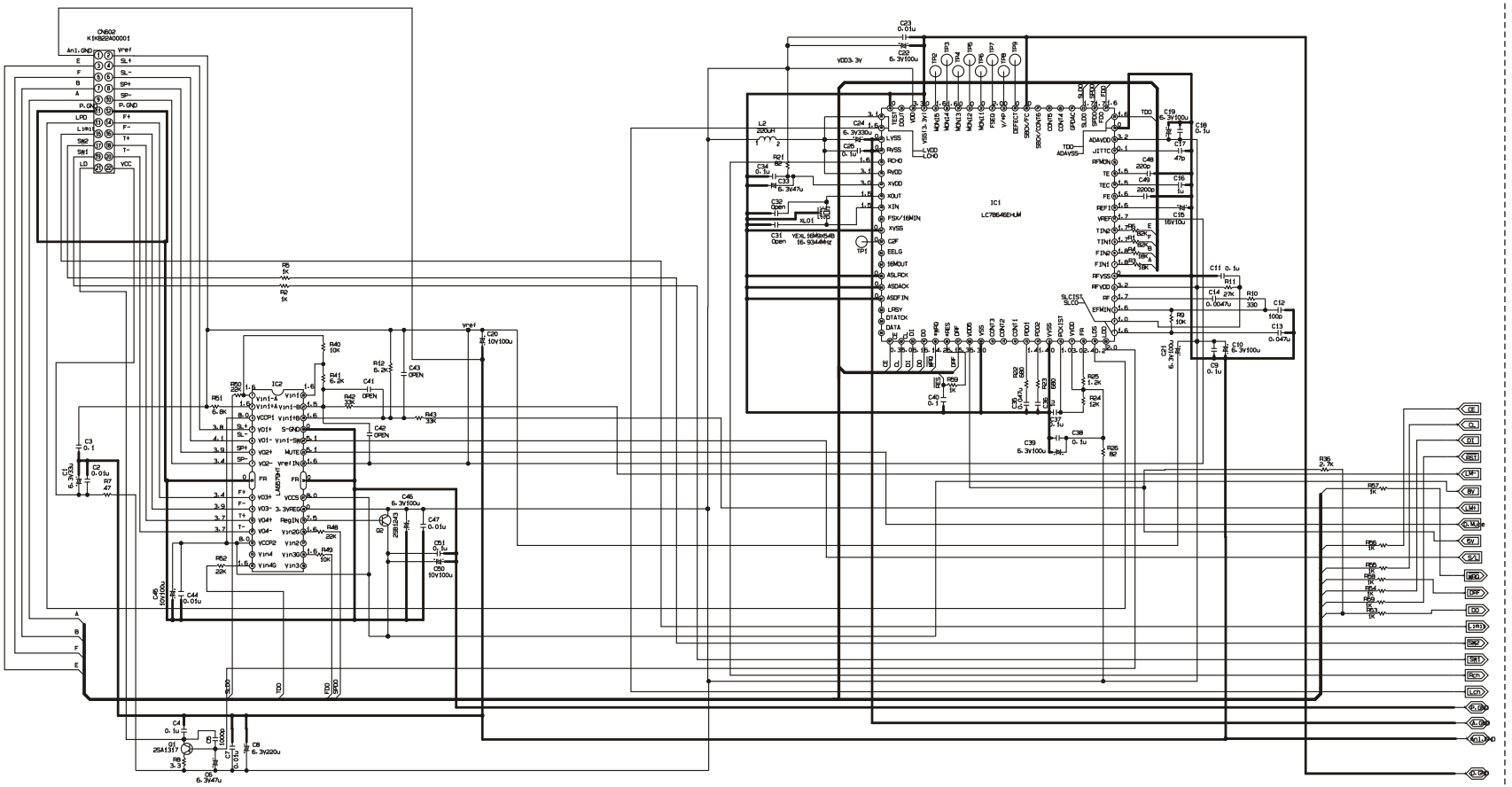
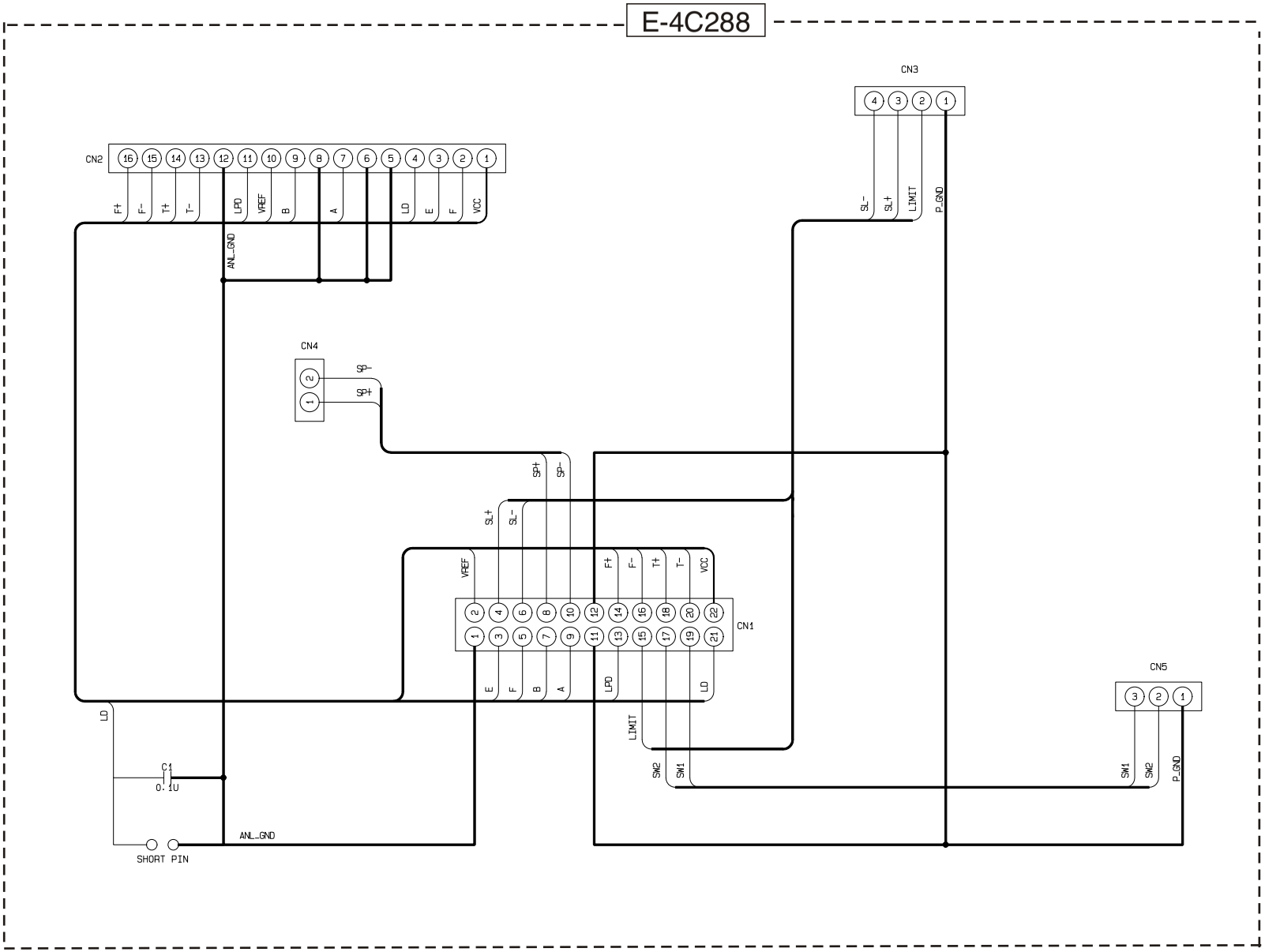
a[19]
a[1-21]
CN1
K1KB22A00001
a[21]
a[9]
a[10]
a[13]
a[12]
a[20]
a[15]
a[5]
a[3]
a[4]
a[11]
Anl.GND
E
F
B
A
P.GND
LPD
Limit
SW2
SW1
LD
Vref
SL+
SL-
SP+
SP-
P.GND
F+
F-
T+
T-
VCC
a[14]
a[6]
a[7]
a[1]
a[2]
a[20]
a[19]
a[18]
a[17]
a[16]
a[8]
a[1-21]



CQ-C1100U / C1110U / C1120U / C1200U Servo Block




CQ-C1303H/C1303U/C1303NE/C1303NW/C1313NE/C1313NW/C1323NE/C1323NW/C1333U/C1333W CD INTERFACE BLOCK